

THE UNITED STATES OF AMERICA

TO AULTO WHOM THESE: PRESENTS SHAUL COME;

Syngenta Seeds, Inc.

MUCCOS, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE MAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE REGORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY TEADS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC LOTS AND THE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE BUSHS TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE BURROSSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT LED BY THE PLANT VARIETY PROTECTION ACT. IN THE UNITED STATES SEED OF THIS VARIETY SE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE NEW YORK OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321

WHEAT, COMMON

'Postrock'

In Testimony Macrest, I have hereunto set my hand and caused the seal of the Hant Bariety Frotestion Office to be affixed at the City of Washington, D.C. this sixth day of December, in the year two thousand and six.

Attest:

Commissioner

Plant Variety Protection Office Agricultural Marketing Service Agriculturo

U.S. DEPARTMENT OF AGRICULTURE

AGRICULTURAL MARKETING SERVICE

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and ork Reduction Act (PRA) of 1995.

APPLICATION FOR PLANT	Y - PLANT VARIETY PROTECTION OFFICE Y VARIETY PROTECTION CERTIFICATE		determine if a plant variety protection certificate is to be issued
	collection burden statement on reverse)		eld confidential until certificate is issued (7 U.S.C. 2426).
1. NAME OF OWNER		2. TEMPORARY DESIGNATION	3. VARIETY NAME
Syngenta Seeds, Inc.		OR EXPERIMENTAL NUMBER	Postrock
		BC95811-7-4	
4. ADDRESS (Street and No.or RD No., City, State,	Zip Code, and Country)	5. TELEPHONE (include area code)	FOR OFFICIAL USE ONLY
6515 Ascher Road		785-210-0218	PVPO NUMBER
Junction City, Kansas 66441		705-210-0210	200600239
ounction City, Ixansus 00111		6. FAX (include area code)	4 EAAAAA
		785-210-0231	CU NO DATE
		/85-210-0251	FILING DATE
7. IF THE OWNER NAMED IS NOT A "PERSON	", GIVE FORM 8. IF INCORPORATED, GIVE	9. DATE OF INCORPORATION	1
ORGANIZATION (corporation, partnership, as		2000	July 13,2006
Corporation	Delaware		
	ESENTATIVE(S) TO SERVE IN THIS APPLICATION		FILING AND EXAMINATION FEES:
Dr. Rollin Sears	Copy to: Chri		1 5 3652 to 730.00
6515 Ascher Road	PO I	Box 30	E \$ 3652 € @ 730.00
Junction City, Kansas 66441	Bert	thoud, CO 80513	6 (6) (
-	rbrur	ns@frii.com	R DATE 07/13/06 8/14/2006
	- 27		C CERTIFICATION FEE:
			E _
			₹ \$ 768.00
			FI * F -
			D DATE 10/13/2006
11. TELEPHONE (Include area code)	12. FAX (Include area code)	13. E-MAIL	
785-210-0218	785-210-0231	rollin.sears@	agripro.com
14. CROP KIND (Common Name)	16. FAMILY NAME (Botanical)	49. DOES THE VADIETY CONTA	IN ANY TRANSGENES? (OPTIONAL)
Hard Red Winter Wheat	Gramineae	<u> </u>	**************************************
Hald Red Whitel Wheat	Grammeae	YES	x NO
15. GENUS AND SPECIES NAME OF CROP	17. IS THE VARIETY A FIRST GENERATION HY	BRID? IF SO, PLEASE GIVE THE AS:	SIGNED USDA-APHIS REFERENCE NUMBER FOR THE
Triticum aestivum	YES X NO	APPROVED PETITION TO DE	REGULATE THE GENETICALLY MODIFIED PLANT FOR
	<u> </u>	COMMERICALIZATION.	
19. CHECK APPROPRIATE BOX FOR EACH AT	TTACHMENT SUBMITTED	20. DOES THE OWNER SPECIF	Y THAT SEED OF THIS VARIETY BE SOLD AS A CLASS
(Follow instructions on reverse)		OF CERTIFIED SEED? (See	Section 83(a) of the Plant Variety Protection Act)
a. X Exhibit A. Origin and Breed	ding History of the Variety	X YES (If "yes", answer ite	ems 21 and 22 below NO (If "no", go to item 23)
h F97			
b. X Exhibit B. Statement of Dis	tinctness	21. DOES THE OWNER SPECIF NUMBER OF CLASSES?	Y THAT SEED OF THIS VARIETY BE LIMITED AS TO
C. X Exhibit C. Objective Descri	indian of Merrian.		IV ha
or [13] Exhibit C. Objective Descri	phon of variety	L YES	X NO
d. X Exhibit D. Additional Descr	riotion of the Variety (Ontional)	IF YES, WHICH CLASSES?	FOUNDATION REGISTERED CERTIFIED
	, and the same of	· -	J. 40.12.11.02
e. X Exhibit E. Statement of the	Basis of the Owner's Ownership	22. DOES THE OWNER SPECIF	Y THAT SEED OF THIS VARIETY BE LIMITED AS TO
- 		NUMBER OF GENERATIONS	?
	ble untreated seeds or, for tuber propagated varietie	·	X NO
	re will be deposited and maintained in an approved p		
repository)	/00.0500 1 11.1 mm		NUMBER 1,2,3, etc. FOR EACH CLASS.
	(\$3,652), made payable to "Treasurer of the United		REGISTERED CERTIFIED
States" (Mail to the Plant Va	VESTED MATERIAL) OR A HYBRID PRODUCED		cessary, please use the space indicated on the reverse.) DMPONENT OF THE VARIETY PROTECTED BY
	SED OF, TRANSFERRED, OR USED IN THE U. S.		RIGHT (PLANT BREEDER'S RIGHT OR PATENT)?
OTHER COUNTRIES?	, ,		
XIYES	NO	YES	NO
IF YES, YOU MUST PROVIDE THE DATE O	OF FIRST SALE, DISPOSITION, TRANSFER, OR U	ISE IF YES, PLEASE GIVE COUNT	TRY, DATE OF FILING OR ISSUANCE AND ASSIGNED
	STANCES. (Please use space indicated on reverse.		ase use space indicated on reverse.)
	-		est in accordance with such regulations as may be applicable, or
	re will be deposited in a public repository and main	•	
	or this sexually reproduced or tuber propagated pla f Section 42 of the Plant Variety Protection Act.	un vanety, and believe(s) that the vallety is	new, distinct, uniform, and stable as required in Section 42, and is
•	antation herein can jeopardize protection and result i	in penalties.	
SIGNATURE OF OWNER	, , , , , , , , , , , , , , , , , , ,	SIGNATURE OF OWNER	
		The state of the s	
<u> </u>			
NAME (Please print or type)		NAME (Please print or type)	
Dr. Rollin Sears	a stars		
CAPACITY OR TITLE	DATE / /	CAPACITY OR TITLE	DATE
R&D Manager	DATE 6/5/06		
		I	1

will be held in the PVPO for not more than 90 days, then returned to the applicant as unfiled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initiated and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$432 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office

Plant Variety Protection Office Telephone: (301) 504-5518 FAX: (301) 504-5291

Homepage: http://www.ams.usda.gov/science/pvpo/pvp.htm

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority and provide evidence that name has been cleared by the appropriate recognized authority before the Certificate of Protection is issued. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, 10301 Baltimore Avenue, Suite 401 NAL Building, Beltsville, MD 20705. Telephone: (301) 504-5682 http://www.ams.usda.gov/lsg/seed.htm.

ITEM

19a. Give:

- (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
- (2) the details of subsequent stages of selection and multiplication;
- (3) evidence of uniformity and stability; and
- (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 19b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
 - (1) identify these varieties and state all differences objectively:
 - (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
 - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 19c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 19d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 19e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
- 20. If "Yes" is specified (seed of this variety be sold by variety name only, as a class of certified seed), the applicant MAY NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
- 23. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
- See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.
- 22. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)

The variety 'Postrock' will be constituted from Breeders seed, and proceed through Foundation, Registered and Certified in succeeding genetations. Generations which may be multiplied will be limited to Breeders seed, Foundation, Registered and Certified.

23. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

Limited quantities of foundation seed were sold in October of 2005 in Kansas. Foundation and Registered seed stocks of Postrock will be available in the Fall of 2006 with Certified sales in 2007.

24. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. The fees for filling a change of address; owner's representative; ownership or assignment; or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, political beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

Exhibit A. Origin and Breeding History of Postrock

Postrock was derived from the cross Ogallala/KSU94U261//Jagger (x95811) which was made at Kansas State University in 1995. Ogallala is a cultivar released by AgriPro in 1994, it was crossed with KSU94U261 which was derived from the cross Tam 107*2//PI355520/PI265008. PI355520 and PI265008 are accessions of Triticum monococcum and Tam 107 is a cultivar released by Texas A&M. The F₁ was then crossed with Jagger a cultivar developed and released in 1994 by Kansas State University. The final F_1 was grown in the greenhouse in 1995, the F_2 grown in the field in 1996 and F₃ seed harvested. A bulk sample of the F₃ seed was provided to Dr. John Moffatt of AgriPro for further selection and evaluation. The F₃ was grown at Nardin, OK in 1998 and bulked. The F₄ was planted at BellePlaine, KS in 1999 and heads selected. F₅ head rows were planted at Humboldt Creek, KS in 2000 and BC95811-7 was selected based upon improved disease resistance, short plant height, medium maturity and good stand-ability. In 2001 BC95811-7-4 was reselected for uniform leaf rust resistance. It was tested in AgriPro yield trials from 2002-2005. It was tested in the Southern Regional Performance Nursery in 2004 and 2006 under the selection number W03-20. Postrock is a hard red winter wheat.

In 2004 twenty-four 70' progeny plots were grown in Eaton, Colorado. These progeny plots were evaluated for phenotypic uniformity and were bulked harvested to produce 11,051 pounds of Breeders seed. In 2005 a 4.3 acre Breeders seed increase was grown in Eaton, Colorado which produced 17,652 pounds of Foundation seed.

Postrock has been uniform and stable since 2004. Less than 0.8% of the plants were rogued from the Breeders seed increase in 2005. Approximately 80% of the rogued variant plants were taller height wheat plants (8 to 15 cm), 5% were whited chaffed wheat plants and 5% were awnless wheat plants. Up to 0.8% variant plants may be encountered in subsequent generations.

Exhibit B. Statement of Distinctness

Postrock most similar to the hard red winter wheat 'Jagger'. However it can be distinguished by the following characteristics:

- Postrock has a tapering head shape (Eaton, Colorado 2004; Lucerne, Colorado 2005). Jagger has a strap head shape (Lucerne, Colorado 2004-2005).
- Postrock has a middense head density (Eaton, Colorado 2004; Lucerne, Colorado 2005). Jagger has a lax head density (Lucerne, Colorado 2004-2005).
- Postrock has midlong glume length (Eaton, Colorado 2004; Lucerne, Colorado 2005). Jagger has a long glume length (Lucerne, Colorado 2004-2005).
- Postrock has a medium glume width (Eaton, Colorado 2004; Lucerne, Colorado 2005). Jagger has a wide glume width (Lucerne, Colorado 2004-2005).

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 2.5 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, political beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE DIVISION BELTSVILLE, MARYLAND 20705 **EXHIBIT C**

OBJECTIVE DESCRIPTION OF VARIETY WHEAT (Triticum Spp.)

	WHEAT	(Trit	icum S	Spp.)			
NAME OF APPLICANT(S)	TEMPORARY OR EXPERIMENT	TAL DESIGN	ATION		VARIETY NAM	E	
Syngenta Seeds, Inc.	BC95811-7-4				Postroc	ek –	
ADDRESS (Street and No. or RD No., City, State, Zip Cod	e, and Country)			·	FOR OFFICIAL	USE ONLY	
6515 Ascher Road					PVPO NUMBER		
Junction City, Kansas 66441					,	20060(1239
PLEASE READ ALL INSTRUCTIONS C.	AREFULLY:						
Place the appropriate number that descr) when number is either 99 or less or 9 o Comparative data should be determined used to determine plant colors; designate lack of response may delay progress of y	r less respectively. Data for from varieties entered in the e system used:	quantitat same tri	ive plant c ial. Royal	haracters sho Horticultural S	ould be based Society or an	d on a minimum of 1	00 plants. tandard may be
1. KIND:		/ERNALIZ	ATION:	·			
1=Common 2=Durum 3=Club 4=Other (specify)_		_	2	1=Sprin 2=Winte 3=Othe	er		
3. COLEOPTILE ANTHOCYANIN:		4 . J	UVENILE	PLANT GRO	WTH:		
1=Absent 2=Pr	esent		2	1=Prost	trate	2=Semi-erect	3=Erect
5. PLANT COLOR (boot stage):		6. F	LAG LEA	F (boot stage) :		
1 = Yellow-Green 2 = Green			1	1 = Erec	ct	2 = Recur	ved
3 = Blue-Green			2	1 = Not	Twisted	2 = Twiste	ed
			2	1 = Wa	x Absent	2 = Wa x F	Present
7. EAR EMERGENCE:	<u> </u>						
0 0 0 Numl	per of Days (Average)						
0 0 Numi	per of Days Earlier Than	*	· · · · · · · · · · · · · · · · · · ·				
Same	: As	*		٠.,			
0 5 Numb	per of Days Later Than	* Jag *Relative)-Approved Co	ommercial Va	ariety Grown in the S	Same Trial
8. ANTHER COLOR:							
1 = YELLOW 2	= PURPLE						
ST-478-06 (4-03) designed by the Plant Variety Protection Office using Microsoft	Word						

0 8 0	cm (Average)			00600	638
0 0	cm Taller Than Same As cm Shorter Than	* *Jagger *			
STEM:		- W			
A. ANTHOCYANIN	1 = Absent 2 = Present	D. INTERNODE 1 5	1 = Hollow Number of Nodes	2 = Semi-solid	3 = Solid
B. WAXY BLOOM	1 = Absent 2 = Present	E. PEDUNCLE	1 = Erect	2 = Recurved	3 = Semi-erec
C HAIRINESS (la	st internode of rachis)	0 0 F. AURICLE	cm Length		
2	1 = Absent 2 = Present	2	Anthocyanin	1 = Absent	2 = Present
		2	Hair:	1 = Absent	2 = Present
HEAD: (At Maturity)					
A. DENSITY		C. CURVATURE			
2	1 = Lax 2 = Middense (Laxidense) 3 = Dense	2	1 =Erect 2 = Inclined 3 = Recurved		
B. SHAPE	1 = Tapering 2 = Clavate 3 = Strap 4 = Other (specify)	D. AWNEDNESS	1 = Awnless 2 = Apically awnlett 3 = Awnletted 4 = Awned	ted	
GLUMES: (At Maturi	ty)				
A. COLOR	1 = White 2 = Tan 3 = Other (specify)	E. BEAK WIDTH 2	1 = Narrow 2 = Medium 3 = Wide		
B. SHOULDER		F. GLUME LENGT	н		
4	1 = Wanting 2 = Oblique 3 = Rounded 4 = Square 5 = Elevated 6 = Apiculate 7 = Other (Specify)	2	1 = Short (ca. 7mm 2 = Medium (ca. 8r 3 = Long (ca. 9mm	nm)	
C. SHOULDER WI	ртн	G. WIDTH			
2	1 = Narrow 2 = Medium 3 = Wide	2	1 = Narrow (ca. 3m 2 = Medium (ca. 3. 3 = Long (ca. 4mm	5mm)	
D. BEAK					
3	1 = Obtuse 2 = Acute 3 = Acuminate				

13. SE	EED:										
	A. SHAPE			Ε.	COLOR			200	600	23	g
	4	1 = Ovate				1	1 = White	500 (B) 650	10 10 100	ಯಾಜನ ವಿಸ್ತೇ	dib.
		2 = Oval			3		2 = Amber				
		3 = Elliptical					3 = Red				
E	B. CHEEK			F.	TEXTUR	E	4 = Other (Specify)				
] 1=Kounded				_ 7	1 = Hard				
	1	2=Angular			1		2 = Soft				
		_					3 = Other (Specify)				
C	C. BRUSH			G.	PHENOL	REACT	TON (See Instruction	ıs)			
	2	1 = Short		lot Collared	0	1	1 = Ivory	4 = Dark	Brown		
	<u> </u>	2 = Medium	2=0	Collared	•]	2 = Fawn	5 = Black			
0	. CREASE	5 - Long		H.	SEED W	EIGHT	3 = Light Brown				
		7 1 = Width 60% or le	ess of Kernel		<u> </u>		ŀ				
	1	2 = Width 80% or le	ess of Kernel		N	Α	g/1000 Seed	(Whole nur	nber only)		
		3 = Width Nearly as	Wide as Kerne								
	,	1 = Donth 20% or to	an at Kamal	i.	GERM SIZ	4E •	4				
	1	1 = Depth 20% or le 2 = Depth 35% or le			2		1 = Small 2 = Midsize				
	<u> </u>	3 = Depth 50% or le			<u> </u>	1	2 = Midsize 3 = Large				
14. DIS	EASE:	DI EACE INDICATE THE C	DEGIELO DA OF	00.000				*****			
IT. DIC	LAGE.	PLEASE INDICATE THE S (0 = Not Tested	PECIFIC RACE 1 = Susceptil		TESTED Resistan		3 = Intermediate	4 = Tolera	ent)		
Γ	2	Stem Rust (Puccinia grami	•	_	 1	_	*		,		
<u> </u>	2		•	1	_		st (Puccinia recond		c) rie	ld races	3
<u>L</u>		Stripe Rust (Puccinia striifo	•	races (=	-	Smut (<i>Ustilago tritici</i>	•			
	4	Tan Spot (Pyrenophora trit			=	Flag Sn	nut (<i>Urocystis agrop</i>	yri)			
Ļ	0	Halo Spot (Selenophoma o	lonacis)		ᆜ	Commo	n Bunt (Tilletia tritic	i or T. laevis	;)		
<u> </u>		Septoria nodorum (Glume	Blotch)	0	닐	Dwarf B	unt (<i>Tilletia controve</i>	ersa)			
Ļ	0	Septoria avenae (Speckled	Leaf Disease)		<u> </u>	Kamal I	Bunt (<i>Tilletia indica</i>)				
	4	Septoria tritici (Speckled Lo	eaf Blotch)	3		Powder	y Mildew (<i>Erysiphe</i> (graminis f. s	sp. <i>tritici</i>)	Field	lraces
	0	Scab (Fusarium spp.)		0		Snow M	lolds				
	0	Black Point (Kernel Smudge)	0		Commo	n Root Rot (Fusariu	m, Cochliob	olus and E	lipolaris s	spp.)
	0	Barley Yellow Dwarf Virus (BYDV)	0		Rhizoct	onia Root Rot (<i>Rhizo</i>	octonia sola	ni)		
	2	Soilborne Mosaic Virus (SB	MV)	0		Black C	haff (Xanthomonas	campestris	pv. translu	cens)	
	3	Wheat Yellow (Spindle Stream	ak) Mosaic Virus	. 0		Bacteria	l Leaf Blight (Pseud	lomonas syr	ingae pv. s	syringae)	t
	4	Wheat Streak Mosaic Virus	(WSMV)			Other (specify)				
<u></u>		Other (specify)			_	Other (specify)				
<u></u>		Other (specify)				Other (specify)	·			
		Other (specify)]	Other (a	specify)				
15. INSI	ECT: (()=Not Tested; 1=Susceptible	; 2=Resistant; PLEASE SPEC		_	=Toleran	1)				
	1	Hessian Fly (<i>Mayetiola dest</i>		- 1 DIVI 18	"	eaca) Other (s	specify)				
	0 :	Stem Sawfly (Cephus spp.)			j ,	Other (s	specify)				
	0 (Cereal Leaf Beetle (Oulema	melanopa)]	Other (s	specify)				
ST-470	-06 (4-03) designed by the P	lant Variety Protection Office using Microsoft Word									

15. INSECT: (continued)

(0=Not Tested;

1=Susceptible; 2=Resistant;

3=Intermediate;

4=Tolerant)

0	PLEA Russian Aphid (Diuraphis noxia) Greenbug (Schizaphis graminum)	SE SPECIFY BI	OTYPE (where i	octed) Other (specify) Other (specify)	20	06	Û	0
0	Aphids							
 			·····				 	
16. ADDITIONAL	None	E, OR GENER	AL COMMENT	S :				

Exhibit D. Additional Description of Postrock

Postrock is a hard red winter wheat developed by AgriPro for grain production. It was evaluated and tested under the experimental designations BC85811-7-4 and W03-20. Postrock is derived from the cross Ogallala/KSU94U261//Jagger made by Kansas State University in 1995. All selections and evaluations were done by AgriPro. Postrock has been evaluated in AgriPro, USDA regional and State Variety yield trials from 2002-2005. It has been stable and uniform since 2004. Postrock is a tall semidwarf variety in plant height, awned and has brown chaff at maturity. It has medium maturity and excellent straw strength. It has erect flag leaves and the spikes are mid-dense at maturity. Postrock is resistant to current central plains field races of stem rust, stripe rust and leaf rust. It is resistant to wheat soil-borne mosaic virus and tolerant to wheat streak mosaic virus and intermediate in response to wheat spindle streak mosaic virus. Postrock is tolerant to Speckled leaf blotch and tan spot. It is intermediate to powdery mildew, and is susceptible to Hessian Fly. Postrock is best adapted to the central and western high plains south of interstate 80.

Juvenile growth habit is semi-erect. Auricle anthocyanin and auricle hairs are present. Plant color at boot stage is dark green. Anther color is yellow. Flag leaf is erect and twisted at boot stage. Head shape is tapering and awned. Glume shoulder shape is square with an acuminate beak. Glume length is midlong and glume width is midwide. Chaff color is brown' at maturity. Seed shape is ovate with medium length brush hairs that occupy a large area of the seed tip. Seed crease depth is shallow and seed crease width is narrow. Seed cheeks are rounded.

			Wht	Fir		NHR	Fir		PK	Peak				Bake Mix	Bake Chart	Loaf			
Year	Designation	Loc	Prot	Prot	Fir Yid	D	Hrd	ASH	Time	HT	TOL	TR	ABS	Time	PKtime	VOL	Grain	Tex	Color
2004	BC950811-7-4	HK	14.7			49													
2004	BC950811-7-4	HK	11.5			39													
2004	BC950811-7-4	HK	12.5			49													
2004	BC950811-7-4	HK	13.3			55													
2004	BC950811-7-4	MK	13.7	12.7	66.7	85	128	0.430	2.75	5.00	695	7	62.0	3,50	3.3	995	5	4	3
2004	BC950811-7-4	SK	12.9	12.0	70.1	77	124	0.355	4.00	4.75	889	6	62.5	4.20	3.4	875	5	4	3
2004	BC950811-7-4	SK	14.3	13.5	68.1	65	128	0.343	4.25	4.75	1019	4	63.0	4.20	3.9	950	4	3	3
2003	BC950811-7-4	JS	10.3	9.0	65,7	74		0.378	2.50	4.75	792	6	57.5	2.80	2,3	880	5	4	3
2002	BC950811-7-4	GJ	15.0	13.9	69.5	60			3.25	4.75	788	5	65.0	3.00		1100	4	3	3
2004	Jagalene	НK	14.1			71													
2004	Jagalene	HK	14.2			75													
2004	Jagalene	HK	13.3			72													
2004	Jagalene	HK	14.8			69													
2004	Jagalene	HK	14.1			74													
2004	Jagalene	HK	14.3			70													
2004	JAGALENE	MK	14.0	13.0	66.2	95	158	0.485	3.25	5.25	732	7	65.0	3.50	3.3	975	5	3	3
2004	JAGALENE	SK	13.0	11.8	72.1	90	145	0.430	4.50	5.00	1145	4	65.0	5.10	4.7	950	5	3	3
2004	JAGALENE	SK	14.2	12.8	65.6	83	148	0.406	5.00	4.75	1155	4	66.0	5.00	4.8	995	5	3	3
2003	JAGALENE	JC	13.0	11.6	70.2	86		0.434	4.25	5.25	990	4	66.0	4.20	3.8	935	4	3	3
2003	JAGALENE	JS	11.1	10.1	69.5	78		0.419	4.00	5.25	1010	5	63.0	4.30	3.8	860	4	3	3
2002	JAGALENE	GJ	15.1	13.6	66.7	66			4 25	5 00	984	2	67 D	3 00		1060	4	3	4

I 0211 0CK (BC92811-7-4)		
Agronomics & Disease characteristics	AgriPro ratir	ng Source
Barley Yellow Dwarf Virus: n/a	n/a	
Head scab: n/a	n/a	
Hessian Fly: susceptible	9	SRPN
Leaf Rust: resistant	2	AgriPro & SRPN
Stem Rust: resistant	1	SRPN
Stripe Rust: resistant	1	AgriPro & SRPN
Powdery Mildew: moderately susceptible	6	AgriPro
Septoria leaf blotch: moderately resistant	4	AgriPro & SRPN
Tan Spot: moderately resistant	4	AgriPro
Wheat soil borne mosaic virus: resistant	1	AgriPro & SRPN
Wheat spindle streak mosaic virus: intermediate	5	AgriPro
Wheat streak mosaic virus: moderately resistant	4	AgriPro
Acid Soil Tolerance: moderately susceptible	6	AgriPro
Coleoptile length: medium	5	AgriPro
Grazing potential: n/a	n/a	
Height: medium	4	AgriPro & SRPN
Maturity: medium	4	AgriPro & SRPN
Preharvest sprouting tolerance: good	4	AgriPro
Milling & baking quality: good	Good	AgriPro & SRPN
Protein: good	Good	AgriPro & SRPN
Seed size: average	Average	AgriPro & SRPN
Shattering reputation: very good	3	AgriPro
Straw strength: excellent	2	AgriPro & SRPN
Test Weight: excellent	2	AgriPro & SRPN
Winterhardiness: average	6	AgriPro & SRPN
Yield Potential where adapted: excellent		AgriPro

Rating: 1 = best score (resistant, short, strong straw, early, etc.), 9 = worst score (susceptible, tall, weak straw, late, etc.)

Average Headin	ng & Plant Hei	ght notes from	Junction City	2002-2005
	Heading (Julian)	Plant Height	
(cm)				
Platte	131		78.0	
Jagger	125		90.0	
PostRock	130		85.0	
NuGrain	131		78.0	•
Platte2	129		78.0	

APPENDIX (AgriPro yield data 2002-2005)

Agripro Wheat W03-20 Historical Performance Comparison

Central Plains 4 Year Analysis

Variety	2002 Yid	2002 Tw	2003 Yld	2003 Tw	2004 Yld	2004 Tw	2005 Yld	2005 Tw	Avg Yld	Avg TW
W03-20	50.5	56.6	103.7	61.2	59.3	61.6	56.4	58.7	67 <i>.</i> 5	59.5
CUTTER	50.8	57.1	#	#	59.2	61.3	53.0	58.0	54.3	58.8
JAGALENE	52.8	56.3	95.4	61.0	63.8	61.8	54.6	58.5	66.6	59.4
JAGGER	49.5	55.2	96.6	59.7	53.9	58.6	55.5	57.4	63.9	57.7
Averages	50.9	56.3	98.6	60.6	59.1	60.8	54.9	58.1	63.1	58.9

Western Plains 4 Year Analysis

Variety	2002 Yid	2002 Tw	2003 Yld	2003 Tw	2004 Yid	2004 Tw	2005 Yld	2005 Tw	Avg Yld	Avg TW
W03-20	38.0	54.9	48.5	54.7	54.3	60.3	56.2	57.9	49.2	56.9
JAGALENE	25.0	53.2	59.1	55.9	57.3	58.7	52.7	58.9	48.5	56.7
CUTTER	24.0	49.7			57.4	59.8	49.9	58.1	43.8	55.9
JAGGER	25.3	52.4	54.9	56.7	55.1	59.9	53.1	55.9	47.1	56.2
Averages	28.1	52.5	54.1	55.8	56.0	59.7	53.0	57.7	47.2	56.4

Western Plains (Irrigated) 4 Year Analysis

Averages	86.3	63.7	114.1	60.5	89.5	64.4	76.6	60.7	89.8	62.5
JAGGER	83.3	62.8	106.7	61.0	85.0	63.7	76.7	60.1	87.9	61.9
CUTTER	95.1	63.8			86.4	63.1	74.2	60.9	85.2	62.6
JAGALENE	88.2	63.8	126.7	61. 4	93.9	65.6	75.4	60.7	96.0	62.9
W03-20	78.9	64.5	108.9	59.1	92.8	65.1	80.2	61.1	90.2	62.5
Variety	2002 Yid	2002 Tw	2003 Yld	2003 Tw	2004 Yld	2004 Tw	2005 Yld	2005 Tw	Avg Yld	Avg TW

* Central Plains locations:

Nardin, OK Winfield, KS Partridge, KS Salina, KS Belleville, KS Everest, KS Junction City, KS

Western High Plains

Quinter, KS Goodland, KS Manter, KS Otis, KS Paxton, NE Sidney, NE

Irrigated Western Plains

Paxton, NE Hugoton, KS Imperial, NE

Other Data on yield, agronomics, and disease available at USDA Regional Data base (Southern Regional Performance Nursery -2004, entry W03-20)

Internet Link: http://www.ars.usda.gov/aboutus/docs.htm?docid=4972

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). The information is held confidential until the certificate is issued (7 U.S.C. 2426).

EXHIBIT E STATEMENT OF THE BASIS OF OWNERSHIP

	· · · · · · · · · · · · · · · · · · ·	
1. NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME
Syngenta Seeds, Inc.	BC95811-7-4	Postrock
4. ADDRESS (Street and No. or RD No., City, State, Zip Code, and Country)	5. TELEPHONE (include area code)	6. FAX (include area code)
6515 Ascher Road	785-210-0218	785-210-0231
Junction City, Kansas 66441		
	7. PVPO NUMBER 20	0600239
8. Does the applicant own all rights to the variety? Mark an "X" in the appropriate block. If no, please explain X YES NO		
9. Is the applicant (individual or company) a U.S. national or a U.S. based company? If no, give name of country. X YES		
10. Is the applicant the original owner?	NO If no, please answer <u>one</u> of the following:	
a. If the original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. National(s)? YES NO If no, give name of country		
b. If the original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. based company? YES NO If no, give name of country		
11. Additional explanation on ownership (Trace ownership from original breeder to current owner. Use the reverse for extra space if needed):		

Please see following page.

PLEASE NOTE:

Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:

- 1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
- 2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species
- 3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 0.1 hour per response, including the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, political beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, D.C. 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provide and employer.

Exhibit E. Statement of the Basis of Applicant's Ownership

The variety for which Plant Variety Protection is hereby sought was developed by Dr. Rollin Sears, an employee of Syngenta Seeds, Inc. By agreement between employees and Syngenta, all rights to any invention, discovery, or development made by the employee while employed by Syngenta, were assigned to Syngenta Seeds, Inc., with no rights of any kind pertaining to 'Postrock' being retained by the employees.

The variety 'Postrock' is owned by Syngenta Seeds, Inc.